Programming Languages and Data Access Methods

February 2022

Manufacturer	Programming Language Name	Version	Current Classification	General Availability	Projected	Approved	Divest: Plan	Divest: Execution	Prohibited	Vendor End of Support	References	Notes
Oracle	PL/SQL	All versions	Approved	1995							https://en.wikipedia.org/wiki/PL/SQL	Oracle: https://www.oracletutorial.com/plsql-tutorial/what-is-plsql/ Tech on the Net: https://www.techonthenet.com/oracle/index.php
Oracle	Java	26 (LTS)	Projected		2027						https://endoflife.date/java	https://en.wikipedia.org/wiki/Java_(programming_language)
		20 (LTS)	Projected		2024						https://endoflife.date/java	https://en.wikipedia.org/wiki/Java_(programming_language)
		21	Skipped		9/22/2023							Note: Tracking N and N-1 to LTS versions only while skipping all other version between LTS versions.
		20	Skipped		3/22/2023							
		19	Skipped		9/22/2022							
		18	Skipped		3/22/2022							
		17 (LTS)	Approved	9/14/2021	N	12/31/2021	9/30/2025	9/30/2026	9/30/2027	9/30/2031	https://endoflife.date/java	Java, as developed by the OpenJDK Project, which is owned and primarily employed by Oracle, has been on a 6-month rapid-release cycle since the release of Java 10. Starting with Java 11, new LTS releases occur every six releases, or three years. Java 8 is the last release on the old cycle methodology still in active support. Non-LTS releases are supported for 6 months. The latest supported release in each release cycle can be found at https://www.oracle.com/java/technologies/java-se-glance.html.
		16	Skipped	3/16/2021					Prohibited 9/30/2021	9/30/2021		Note: Tracking N and N-1 to LTS versions only while skipping all other version between LTS versions.
		15	Skipped	9/16/2020					Prohibited 3/31/2021	3/31/2021		
		14	Skipped	3/17/2020					Prohibited 9/30/2021	9/30/2020		
		13	Skipped	9/17/2019					Prohibited 3/31/2021	3/31/2021		
		12	Skipped	3/19/2019					Prohibited 9/30/2019	9/30/2019		
		11 (LTS)	Approved	9/25/2018	N-1	3/31/2019	9/30/2023	9/30/2024	9/30/2025	9/30/2026	https://endoflife.date/java	Java, as developed by the OpenJDK Project, which is owned and primarily employed by Oracle, has been on a 6-month rapid-release cycle since the release of Java 10. Starting with Java 11, new LTS releases occur every six releases, or three years. Java 8 is the last release on the old cycle methodology still in active support. Non-LTS releases are supported for 6 months. The latest supported release in each release cycle can be found at https://www.oracle.com/java/technologies/java-se-glance.html.
		10	Skipped	3/20/2018					Prohibited 9/25/2018	9/25/2018		Note: Tracking N and N-1 to LTS versions only while skipping all other version between LTS versions.
		9	Skipped	9/21/2017					Prohibited 3/20/2018	3/20/2018		
		8 (LTS)	Divest Execution	3/18/2014				3/31/2021	3/31/2022	3/31/2025	https://endoflife.date/java	Java, as developed by the OpenJDK Project, which is owned and primarily employed by Oracle, has been on a 6-month rapid-release cycle since the release of Java 10. Starting with Java 11, new LTS releases occur every six releases, or three years. Java 8 is the last release on the old cycle methodology still in active support. Non-LTS releases are supported for 6 months. The latest supported release in each release cycle can be found at https://www.oracle.com/java/technologies/java-se-glance.html.
		7 and earlier	Prohibited	7/7/2011					Prohibited Jul-31-2019	7/31/2019		First version GA May 1995 from Sun Microsystems. https://en.wikipedia.org/wiki/Java_(programming_language)
CII Honewell Bull	Ada	2012	Prohibited	2012							https://en.wikipedia.org/wiki/Ada_(programming_language)	https://en.wikipedia.org/wiki/Groupe_Bull https://curlie.org/Computers/Programming/Languages/Ada
Association for Computing Machinery (ACM)	ALGOL	DG/L	Prohibited	1972							https://en.wikipedia.org/wiki/ALGOL	
IBM	APL	APL2	Prohibited	1984							https://en.wikipedia.org/wiki/APL_(programming_language)	
IBM	Assembler	BAL	Prohibited	1964							https://en.wikipedia.org/wiki/IBM_Basic_Assembly_Language_and_successors	

Programming Languages and Data Access Methods

February 2022

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Dartmouth	BASIC	All versions	Prohibited	1964							https://en.wikipedia.org/wiki/BASIC	
Bell Labs	"C"	All versions	Prohibited	1973							https://en.wikipedia.org/wiki/The_C_Programming_Language	https://www.section.io/engineering-education/history-of-c-programming-language/
Nantucket Corporation	Clipper	xBase	Prohibited	1997							https://en.wikipedia.org/wiki/Clipper_(programming_language)	aka CA-Clipper
CODASYL	COBOL	All versions	Prohibited	1959							https://en.wikipedia.org/wiki/COBOL	https://en.wikipedia.org/wiki/CODASYL
Embarcadero Technologies	Delphi	All versions	Prohibited	1995							https://en.wikipedia.org/wiki/Delphi_(software)	https://en.wikipedia.org/wiki/History_of_Delphi_(software)
IBM	Fortran	All versions	Prohibited	1957							https://en.wikipedia.org/wiki/Fortran	
Software AG	Natural		Prohibited	1979							https://en.wikipedia.org/wiki/ADABAS#Natural_(4GL)	https://en.wikipedia.org/wiki/Natural_language https://www.xenonstack.com/blog/evolution-of-nlp/
MIT	Lisp	All LISP-based languages	Prohibited	1958							https://en.wikipedia.org/wiki/Lisp_(programming_language)	https://en.wikipedia.org/wiki/List_of_programming_languages_by_type#List-based_languages_%E2%80%93_LISPs
Unisys / Sperry	Mapper	All versions	Prohibited	1975							https://en.wikipedia.org/wiki/MAPPER	
Corel	Paradox	All versions	Prohibited	1985							https://en.wikipedia.org/wiki/Paradox_(database)	
Berkley	Pascal	All versions	Prohibited	1970							https://en.wikipedia.org/wiki/Pascal_(programming_language)	https://www.britannica.com/technology/Pascal-computer-language
IBM	PL/I	All versions	Prohibited	1964							https://en.wikipedia.org/wiki/PL/I	aka PL/1
IBM	Rexx	All versions	Prohibited	1979							https://en.wikipedia.org/wiki/Rexx	
IBM	RPG X	All versions	Prohibited	1959							https://en.wikipedia.org/wiki/IBM_RPG	

The following **data access methods** are considered *Prohibited* technologies by COV per Enterprise Technical Architecture (ETA): Legacy Information Technology (IT) Solutions.

https://www.vita.virginia.gov/media/vitavirginiagov/it-governance/ea/pdf/Legacy-IT-Solutions-Topic-Report.pdf

Vendor	Data Access Name	Version	Current Classification	General Availability	Divest: Plan	Divest: Execution	Divest: Plan	Divest: Execution	Prohibited	Vendor End of Support	References	Notes
	Adabas		Prohibited								https://documentation.softwareag.com/natural/nat6313win/pg/pg_dbms_ada.htm	https://en.wikipedia.org/wiki/Access_method
	IMS		Prohibited								https://flylib.com/books/en/2.869.1.57/1/	https://en.wikipedia.org/wiki/Access_method https://flylib.com/books/en/2.869.1.58/1/ https://en.wikipedia.org/wiki/IBM_Information_Management_System
	VSAM		Prohibited								https://en.wikipedia.org/wiki/Virtual_Storage_Access_Method	https://en.wikipedia.org/wiki/Access_method
	ISAM		Prohibited								https://en.wikipedia.org/wiki/ISAM	https://en.wikipedia.org/wiki/Access_method

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Manufacturer	Programming Language Name	Version	Current Classification	General Availability	Projected	Approved	Divest: Plan	Divest: Execution	Prohibited	Vendor End of Support	References	Notes
	xBase		**Prohibited**								https://en.wikipedia.org/wiki/Microsoft_Data_Access_Components	https://en.wikipedia.org/wiki/Access_method
	Paradox		**Prohibited**								https://en.wikipedia.org/wiki/Microsoft_Data_Access_Components	https://en.wikipedia.org/wiki/Access_method
	Hierarchical Database Access	All	**Prohibited**								https://en.wikipedia.org/wiki/Access_method	e.g. HSAM, HISAM, HIDAM, HDAM, PHDAM, SHSAM, SHISAM, etc.
	Network Database Access	All	**Prohibited**								https://en.wikipedia.org/wiki/Access_method	e.g. BTAM, QTAM, TCAM, VTAM, etc.
	Non-security patch updated data ac	All	**Prohibited**								https://en.wikipedia.org/wiki/Access_method	All data access methods and versions without security patching

February 2022

The following represents COV **programming language classifications** per Enterprise Technical Architecture (ETA): Legacy Information Technology (IT) Solutions and KSE-CMDB and/or Archer research.

https://www.vita.virginia.gov/media/vitavirginiagov/it-governance/ea/pdf/Legacy-IT-Solutions-Topic-Report.pdf

Key	Description
	Emerging
	Projected
	Approved
	Divest: Plan
	Divest: Execute
	Prohibited
	Skipped